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WILLIAM FARQUHAR BARRY: THE REAL MAN BEHIND THE GUNS

BY

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WILLIAM FARQUHAR BARRY: THE REAL MAN BEHIND THE GUNS

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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On 18 July 1879 a Baltimore and Ohio Telegraph Department telegram informed the Adjutant General of the U.S. Army that the Colonel of the Second Artillery, who had been a major general of volunteers in the Civil War, had died at 11:15 A.M. This colonel was William Farquhar Barry, a man forgotten by history. Barry spent forty-one years in the Army and was responsible for the outstanding success of the Union field artillery in the Civil War. From 1861 to 1865 he had been the Chief of Artillery of the Army of the Potomac during the organization of the Union Army and the Peninsula Campaign; the Inspector of Artillery of the U.S. Army; the Chief of Artillery of the Defenses of Washington; and the Chief of Artillery of Sherman's Department of the Mississippi, an army group, during the Atlanta Campaign, the subsequent March through Georgia, and the Carolina Campaign. This paper is a biography of Barry that focuses on his military career, especially his contributions to the United States artillery. Primary sources were extensively used including Barry's Appointments, Commissions, and Promotions File; his Cullum File at the United States Military Academy; and the War Department's official records of the Civil War.

Introduction

On 18 July 1879 a Baltimore and Ohio Telegraph Department telegram informed the Adjutant General of the U.S. Army that the Colonel of the Second Artillery, who had been a major general of volunteers in the Civil War, had died at 11:15 A.M. General William Tecumseh Sherman, the General-in-Chief of the U.S. Army, travelled all the way from St. Louis to Baltimore to attend the memorial service for this colonel.¹ Who was this man so highly thought of by General Sherman that he would personally take time to come to honor him?

In 1977 Edward G. Longacre published a book titled *The Man Behind the Guns: A Biography of Henry Jackson Hunt, Chief of Artillery, Army of the Potomac*.² Hunt's exploits are also chronicled in L. Van Loan Naisawald's *Grapes and Canister: The Story of the Field Artillery of the Army of the Potomac, 1861-1865*,³ the best known, and just about the only, book about Union artillery in the Civil War. Hunt is generally credited with being the organizational genius of the United States artillery in the Civil War. While his contributions were significant, Henry Jackson Hunt is not our man.

The reason General Sherman paid his respects, in person, was that the colonel who died at Fort McHenry had been primarily responsible for the success of the Union field artillery in the Civil War. He had served as Chief of Artillery, Army of the Potomac; Inspector of Artillery, U.S. Army; Chief of Artillery, Defenses of Washington; and as chief of artillery of Sherman's army group during the Atlanta Campaign, the subsequent March

through Georgia, and the Carolina Campaign. He was with Sherman when General Joseph Johnston surrendered. General Sherman wrote this strong indorsement when he recommended his chief of artillery for promotion.

Heretofore I have invariably, since the war has been in progress, refused to recommend officers to promotion as generals, unless each had filled the position in actual battle and demonstrated by an absolute test his fitness. This rule is probably over severe; exceptions do occur; officers hold positions of influence, importance, and of absolute necessity which might debar them from attaining what all honorable and good officers seek to attain, high rank, unless promotion be open to them as well as the officers in the actual command of troops. A case is now before me: . . . , an officer of rare merit, of high professional skill and experience, and of undoubted ability, has held and still holds near me the office of chief of artillery, which is wrongfully construed a staff position. He actually supervises all the artillery of this army, and were it concentrated it would make an actual command of a full division, a proper command of a major-general, but of necessity the artillery is distributed to posts, armies, divisions, and brigades, so that at no time is such a thing possible as a division of artillery; yet we must confess that it is a most important arm of service, absolutely necessary to an army, and its officers should have the incentives of promotion held out as far as possible.⁴

Henry Jackson Hunt, the most famous Civil War artilleryman, said that our man "was the recognized head of all the artillery of all the armies."⁵

This soldier, so lavishly praised by Sherman and Hunt, but forgotten by history, was Major General (Brevet) William Farquhar Barry, U.S. Volunteers, the real "Man Behind the Guns."

Birth to 1861

William Farquhar Barry was born in New York City on 18 August 1818. His mother had to raise him alone because his father died when Barry was very young. He attended New York High School graduating in 1831 at the age of 13. After studying the classics for three years, he received an appointment to the United States Military Academy.⁶ He graduated in 1838 with a commission in the Second Artillery.⁷

There is no way to know why Barry chose artillery, but during the years he was at West Point, the academy was "pervaded by a decided artillery influence." Prominent artillerymen such as Albert E. Church and Robert Anderson were on the faculty, and to this day, cadets' associations with influential and impressive staff and faculty members often weigh heavily on their branch selections. Also, the academy gave added artillery emphasis to the curriculum when the superintendent established an artillery laboratory and increased practice with light artillery.⁸

Barry was a fellow cadet with the following future Civil War generals, all commissioned in the artillery: George G. Meade, Montgomery C. Meigs, Thomas W. Sherman, Braxton Bragg, Jubal Early, William H. French, John Sedgwick, John Pemberton, Joseph Hooker, P. T. Beauregard, Irwin McDowell, E. O. C. Ord, Henry J. Hunt, William T. Sherman, George H. Thomas, Albion Howe, John M.

Brannan, and John F. Reynolds.⁹ This distinguished group is evidence of the strong influence to select artillery as a branch of service during the 1830's and 1840's.

When Barry was commissioned, the United States artillery was beginning to change after many years of stagnation. The Reorganization and Reduction Act of 2 March 1821 had allowed for four artillery regiments of nine companies each.¹⁰ One battery of each regiment was to be organized and equipped as light, or field, artillery.¹¹ "Field artillery," Barry later explained, "accompanies troops in campaign, is with them on the march, and operates beside them on the field of battle."¹²

Seventeen years after passage of the Reorganization and Reduction Act of 1821, the Army still did not have any batteries equipped as light artillery because the government could not afford the horses. The cannoneers of these batteries had served as infantry for these 17 years.

In 1838, the horses that had been used to move the Cherokee Indians to the west of the Mississippi became surplus to the needs of the government. In September, the Secretary of War, Joel R. Poinsett, directed that the four, authorized, light batteries be properly equipped using these surplus horses. The

⁹The term "battery" was not used officially for company-sized artillery units until the formation of the Fifth Artillery in 1861. The term battery will be used for the rest of this paper.

¹⁰Light artillery was horse artillery where each cannoneer was on horseback. In mounted artillery (also called foot), the cannoneers usually walked, but they rode the carriages for fast movements. Eventually, horse and mounted artillery were both called field artillery.

best known historian of the U.S. artillery, William Birkheimer, wrote:

Of the many measures set on foot for building up the department over which he [Poinsett] presided with singular, conspicuous, and universally acknowledged ability, none contributed more to that end, or to the glory of his country's arms in the field, than did the re-establishment, . . . , of this arm [artillery] of service. . . .; for the present it suffices to remark that the field batteries of the regular army, with their records, owe their existence to the military sagacity of Secretary Joel R. Poinsett."

Captain Samuel Ringgold, Third Artillery, was selected to form the first light battery (C, Third Artillery) at Carlisle Barracks, PA. Ringgold's Battery was the only regular battery of the U.S. artillery ever equipped as real "light" artillery during peacetime; all others were actually "mounted" artillery. He was given 27 cannoneers each from the First and Second Artillery, a first lieutenant from the First Artillery, and a second lieutenant from the Second Artillery. The second lieutenant was Barry.¹³

Barry assisted Captain Ringgold in forming the first light artillery.¹⁴ He did such an outstanding job that Captain Ringgold asked Barry to transfer to his battery permanently, but Barry declined, preferring to return to his own Second Artillery.¹⁵

Barry spent the rest of 1838 and the first part of 1839 on the Northern frontier at Buffalo, NY, with Duncan's Battery (A, Second Artillery), helping to maintain U.S. neutrality during the Canada Border Disturbances, the so called Canadian "Patriot Wars."¹⁶ In November, Duncan's Battery went to the artillery

camp of instruction, Camp Washington, NJ, near Trenton, where it spent three months being converted, along with K, First Artillery and B, Fourth Artillery, to mounted artillery.¹⁷ Thus, from the beginning of his career, Barry was identified with the light and mounted artillery, or field artillery. His early experiences "laid the foundations for that knowledge of light artillery service which, twenty-three years afterwards, he turned to good account as chief of artillery when the Army of the Potomac was being organized in 1861."¹⁸

After this reorganization, Duncan's Battery returned to Buffalo where Barry married Katherine McKnight, a member of a prominent local family.¹⁹ In August 1841, Duncan's Battery was assigned to garrison duty at Fort Hamilton, NY, where it remained until the beginning of the Mexican War.²⁰ On 17 August 1842, Barry was promoted to first lieutenant, Second Artillery.²¹

Three years later, Duncan's Battery left New York Harbor for Corpus Christi, TX, to fight in the Mexican War, where the artillery gained an outstanding reputation because of its ability to quickly influence the action both on offense and defense.²² Barry did not accompany his battery to Mexico remaining behind on recruiting duty until September 1846. After being in Mexico for only six months, he became ill and returned home on sick leave until October 1847.²³

Because of his late arrival in Mexico and his sick leave, Barry missed most of the major actions of the war. The only two major battles he could have possibly been in were Monterrey, 21-

23 September 1846, and Vera Cruz, 9-28 March 1847, but there is no evidence that he was involved in either one.²⁴ After returning to Mexico, he served as acting assistant adjutant general of a division and a brigade, and as Aide-de-Camp to General Worth.²⁵

Many famous Civil War generals, such as Braxton Bragg, Thomas W. Sherman, George H. Thomas, Joseph Hooker, Henry J. Hunt, Thomas J. Jackson, A. P. Hill, John F. Reynolds, and Jubal Early, served as artillerymen on the field of battle in the Mexican War. Barry did not have that chance. In a letter Barry wrote to George Cullum on 24 May 1853, he complained:

Having already suffered by invidious distinctions, and in the extinction [*sic*] of some who ought to have known and judged better, I do not care any longer than can be avoided, to remain under the cloud of having never been in Mexico, when the truth is that I was there *more than eighteen months* [emphasis added by Barry], and was favored with a much nearer view of an inglorious coffin, than it would gratify me to be indulged with again.²⁶

After the war, Barry served in garrison with the Second Artillery at Forts Monroe, VA, and McHenry, MD.²⁷ On 1 July 1852, he was promoted to captain, Second Artillery.²⁸

While Barry was at Fort McHenry, a group of artillery officers sent a petition to the Secretary of War entitled Circular Letters to the Secretary of War to be Signed by Artillery Officers, which was published in Baltimore in 1851. In this petition the officers complained about the lack of artillery officers on the ordnance boards that selected their equipment, their service as infantry for extended periods, their poor state

of training as artillerymen, and the lack of a chief of artillery. Barry and Hunt, especially Hunt because of his emotional writings about the state of the artillery during and after the Civil War, may have written the petition because they were both assigned to the Second Artillery which was then headquartered at Baltimore.²⁹

In 1852 and 1853, Barry served with the Second Artillery in Southwestern Florida between Charlotte Harbor, Lake Okeechobee, and the Everglades during the Seminole uprisings.³⁰ The artillerymen served as infantry, built roads, and scouted the local areas.³¹ For the next five years, he served on garrison duty at Baton Rouge, LA, and Fort Hamilton, NY, and on frontier duty at Fort Washita, Indian Territory; Fort Snelling, MN; Fort Leavenworth, KS; and Fort Kearny, NE.³²

In 1856 the War Department appointed three artillery officers, Captains William H. French, William F. Barry, and Henry J. Hunt, to convene the Light Artillery Board to develop a revised system of light artillery tactics and regulation, an appointment that showed their high standing in the artillery community³³. All three were destined to become generals in the Civil War, Barry and Hunt as the senior artillery officers of the Union Army and French as a brigade, division, and corps commander

¹Barry was assigned to Fort McHenry, MD, and Hunt was assigned to Fort Monroe, VA.

in the Army of the Potomac.³⁴

The light artillery board finished its work in January 1859 and the results were released for publication by the War Department in March 1860.³⁵ The manual, Instruction for Field Artillery, was used to train all Union field artillery during the Civil War. Barry's contributions to the Union artillery began with the publication of this important manual. After serving on the Light Artillery Board, Barry returned to Fort Leavenworth.³⁶

A major event of Barry's career occurred at Fort Leavenworth in 1858. Because of his outstanding performance in previous assignments, Barry was selected to command A Battery, Second Artillery, one of the famous light batteries of the Mexican War.³⁷ Command of one of the light batteries was the most coveted position in the artillery. The Secretary of War personally selected the commanders based upon the best qualified criterion as opposed to the seniority system prevalent in the army at the time.³⁸

In January 1861, Captain Barry, with 23 years of service, was still commanding his battery at Fort Leavenworth. He had served with the Second Artillery in field artillery batteries since his commissioning, mainly as infantry. Although he served

³⁴Only five officers served during the Civil War as general officers of artillery. In addition to Barry and Hunt, they were Davis Tillson, John M. Brannan, and Albion P. Howe. Barry and Hunt served the entire war as artillery generals; the other three served as generals of infantry for most of the war. Also, Howe was Barry's son-in-law. There were over 150 major general commissions (does not include brevet rank) given from 1861 to 1866, "in some cases to officers who never took the field or held commands," but not one was given for artillery service.

18 months in the Mexican War, he missed all the major battles. He was coauthor of the then current artillery drill manual. This was the sum of all his experiences, yet within six months he would be a brigadier general responsible for organizing, equipping, and training the field artillery of the U.S. Army as it entered the Civil War.

Status of the U.S. Artillery in 1861

Some knowledge of the history of the United States artillery from the Revolutionary War to January 1861 is required to understand the challenges Barry faced at the beginning of the Civil War. This history is the story of developing an artillery system, or standards, and the tactics and organization to use the system.

Stanley Falk in his "Artillery for the Land Service: The Development of a System" defines an artillery system as follows:

Devising a system of artillery meant not only determining the types, calibers, and weights of all the weapons, and the material of which they were to be built, but also doing the same for the carriages, limbers, caissons, ammunition chests, and for all of the other equipment, instruments, and tools necessary for the service of the weapons.³⁹

Falk further asserts that the development of an artillery system did not include the development of organization and tactics of the artillery.⁴⁰ These functions were left to the

artillery. The separation of ordnance and artillery functions stifled the growth of the field artillery during the first half of the Nineteenth Century because the powerful chiefs of ordnance decided which equipment the artillery received, while the artillery officers developed, usually in isolation from the ordnance bureau, the organization and tactics.

The origins of the United States field artillery can be traced to 1754, when a Frenchman, General Jean Baptiste Vacquette de Gribeauval, developed a complete system of artillery that separated the siege from the field artillery, organized the field artillery into batteries of eight guns with the ability to haul ammunition and make repairs organic to the batteries, made gun carriages much lighter, introduced interchangeable gun and carriage parts, reduced the types and calibers and weight of weapons, improved range and accuracy, and mounted the cannoneers. The French and British eventually adopted most of the Gribeauval system.

Fifty-two years later the British improved the system by developing block trails and a new way of attaching the carriage to the limber which significantly improved artillery mobility over rough ground. The French did not adopt these improvements until 1827.⁴¹

In 1775, General George Washington made General Henry Knox his chief of artillery and ordnance. At that time the ordnance was the administrative branch of the artillery. The next year the chief's of ordnance title was changed to the Commissioner of

Artillery Stores.

Knox obtained a hodge-podge collection of guns of different calibers, type, and manufacture, mostly British and French. Since he did not adopt all the Gribeauval equipment, he did not have a system, but was mainly concerned with organizing and training his cannoneers. He had Washington's confidence and support, and when the war was over the United States artillery was equal to that of the European armies.⁴² Except for the Mexican War, this was the last time the United States artillery equalled European artillery until at least one year into the Civil War.

After the Revolutionary War, the army only had two batteries of artillery. In 1786, this was increased to four. The cannoneers served mainly as infantry.⁴³

In the Eighteen Century, artillery pieces were brought onto the field of battle by teamsters who were not soldiers. Many times they abandoned the guns. In 1793, the British made soldier drivers a part of their artillery organization. Napoleon did the same in 1801. Marshall Marmont, responsible to Napoleon for artillery reforms, claimed, "This militarization of the services [civilian drivers] had the happiest of influence on the mobility of batteries and their rates of fire."⁴⁴ The United States also added soldier drivers in 1812.⁴⁵ William L. Haskin, historian of the First U.S. Artillery and coauthor of the *Army of the United States*, asserted:

Very little stress has been laid on this reform; yet it was the one thing needful to a complete organization, and the wonder now is that it was not sooner thought of. It accomplished more for the advancement of field artillery than any other single change ever has or ever can do.⁴⁶

In 1794, the engineers and artillery were combined into one regiment of 16 companies. Four years later a second regiment of 12 companies was formed. The Commandant of the Corps, a lieutenant colonel, was the "Chief of Engineers, Ordnance, and Artillery" and was responsible for administration of the corps and acquisition of equipment. After ten years the two branches separated. The engineers became a single corps with a chief of engineers, but the artillery did not have a chief.⁴⁷

In April 1808, the first regiment of light artillery was authorized by Congress. Captain George Peter organized and equipped the first battery, calling it the "flying artillery." It consisted of two six-pounders with eight horses per gun section. The cannoneers rode on the caissons, so it was really mounted artillery. Peter took his mounted sections to Washington for the Fourth of July celebrations and excited the crowd, which included President Jefferson, with his maneuvers and salutes. One witness was so impressed that he wrote:

When ordered to manoeuver [sic], Peter proceeded a distance of three miles, dismounted, unlimbered, formed battery, fired a national salute, remounted, returned to where he started from, dismounted, unlimbered, formed battery, and fired another salute, in the space of twenty-two minutes.⁴⁸

Impressive or not, Peter's battery was dismounted during the next summer because of the high costs of maintaining the horses.

Unlike the other corps such as the engineers and ordnance, the artillery did not have a chief to argue their case.⁴⁹ This ends the history of U.S. light artillery from the Revolutionary War until the War of 1812.

In 1812, the artillery was increased by two regiments, and the ordnance and artillery were separated into two branches.⁵⁰ The ordnance got a chief, the Commissary General of Ordnance; there was still no chief for the artillery.⁵¹ The two artillery regiments had some fine officers, one being Winfield Scott, but just like during the Civil War they could get promoted faster by leaving the artillery.⁵² Artillery being a technical branch, it was hard to replace trained artillery officers when they left the artillery for promotion in other branches. General Dearborn, General-in-Chief of the Army, said, "I am in want of experienced artillerists, whatever relates to our artillery and ammunition remains in a chaotic state for want of suitable officers."⁵³ In the War of 1812, the artillery served mainly as infantry.⁵⁴

Two years after the war the artillery was reorganized into one corps of twelve battalions of four batteries each with the highest authorized rank being lieutenant colonel. The light artillery regiment remained on the rolls of the Army. The artillery still did not have a chief.⁵⁵

In 1818, the Chief of Ordnance, Colonel Decius Wadsworth, recommended dropping the Gribeauval system of carriages and adopting the improved British carriages. Gribeauval's tremendous

prestige caused the Secretary of War to disapprove Wadsworth's proposal. Instead, the Secretary adopted the Gribeauval system entirely, making it the first official, complete artillery system adopted by the United States.⁵⁶

Three years later the artillery was reorganized again when the Ordnance, the Light Artillery Regiment, and the Corps of Artillery were consolidated into four regiments of nine batteries each. One of the batteries of each regiment was, by law, to be designated and equipped as light artillery. The ordnance branch was merged with the artillery, like the organization of European armies, and a school of practice for eight batteries was established at Fort Monroe.⁵⁷ This was a workable organization but still there was no chief of artillery. The Union entered the Civil War with this four-regiment organization, but with minor changes.

In 1828, the War Department learned that the French had adopted and improved the British stock trail carriages. Three years later, the Secretary of War appointed an ordnance board to study the new French system of artillery. Major General Alexander Macomb, the General-in-Chief of the Army himself, chaired the board. Much like today's weapons acquisitions, it took five years for the War Department to make a decision to adopt the new French system, which included the new system of carriages, a list of calibers and types of field artillery, and artillery guns made of bronze instead of cast iron. The Secretary of War had approved a new artillery system that, with

minor changes, was used in both the Mexican and Civil Wars.⁵⁸

Even though these were positive changes, in the following years several steps backwards were also made. The merging of artillery and ordnance only lasted until 1827 when the ordnance department appeared in the Army Register as a bureau of the War Department. Five years later, the portion of the Reorganization and Reduction Act of 1821 that merged the ordnance with the artillery was repealed.⁵⁹ The cannoneers at the Artillery School were used as infantry in the Black Hawk and Florida Indian Wars causing the school to be closed.⁶⁰

In 1838 a battery was added to each of the four regiments bringing them to 10 batteries each, and the light batteries that were authorized by the Act 1821 were finally organized and equipped. In the intervening 17 years the cannoneers of the light batteries had served as infantry.⁶¹

Ordnance boards meeting after 1839 consisted solely of ordnance officers.⁶² The feelings of artillerymen about this was addressed in *Circular Letters to the Secretary of War to be Signed by Artillery Officers*.

. . . the opinion or advice of an artillery officer in matters appertaining to his own arm is with us rarely asked and never considered, unless they agree with those of the ordnance board, and our own experience is thus rendered useless to the service and the country. A change in this would be of advantage to both departments.⁶³

The year after the light batteries were equipped and mounted Captain Robert Anderson, an instructor at West Point and later the defender of Fort Sumter, translated the French artillery

drill book: Instruction for Field Artillery, Horse and Foot; into English. Captain Ringgold added the British method of servicing the gun, but the French system of battery maneuvers was retained. Except as modified by French, Barry, and Hunt in 1859, this translation, with Ringgold's addition, formed the basis of the drill system for the Union field artillery in the Civil War.⁶⁴ The reorganization of 1821, the artillery system adopted in 1836, the equipping of the light batteries in 1838, and the Anderson Drill Manual constituted a workable artillery and contributed to the tremendous success of the artillery in the Mexico War.

In this war, the artillery regimental headquarters were not used as tactical headquarters. The batteries were parcelled out to infantry units with the battery being the highest tactical unit. General Zachary Taylor, in the North, attached one field artillery battery to each brigade, while General Winfield Scott, in the South, attached the artillery to divisions, which were about the same size as brigades of the Civil War.⁶⁵ These assignments did not allow the batteries to mass their fires.

Birkheimer's opinion about the "lessons learned" by the artillerymen from the Mexican War was that ". . . the operations of that war were conducted on too small a scale to enable practical knowledge to be acquired as to the best organization to be given artillery to accompany a large army."⁶⁶ He further opines, "Not only this, but what was learned, being acquired by experience with small forces, contracted the field of vision, and to many officers was a detriment, by leading them to suppose the

same principles should govern in the distribution of the artillery in large armies like those of the Civil War."⁶⁷

The Mexican War was the last American war in which most soldiers were armed with the smooth bore musket. Since the smooth bore artillery outranged the smooth bore musket, the artillery was used not only in a defensive role, but also in an offensive role, much as Napoleon had done.

In 1847, a bill was introduced to give the artillery a chief, to increase each artillery regiment from 10 to 12 batteries, and to organize and equip four more light batteries, one per regiment. The authorizations for additional batteries and the light batteries were approved, but the position of chief of artillery was not.⁶⁸

Only three of the four light batteries were actually equipped and mounted. So, at the end of the Mexican War, there were seven properly equipped field artillery batteries. By March 1851 all but two of these batteries were dismounted. Again, the horses cost too much to maintain in a peacetime army.⁶⁹

In 1852, the artillery tried to get two more batteries mounted, for a total of four, but a new reason was given for not doing so. The Minie rifle had been used in the Crimean War. Riflemen could now kill cannoneers at ranges greater than the effective range of smooth-bore artillery. This new technology threatened to reduce the role of the artillery to only the defense.⁷⁰ But General Winfield Scott, an old artilleryman, decided in favor of the artillery, and upon his recommendation,

the Secretary of War mounted the two batteries."²

From 1851 to 1860, the field artillery batteries that would form the nucleus of the Union field artillery were in service throughout the country, serving mostly as infantry and cavalry. By 1858 seven of the eight authorized field artillery batteries were properly equipped. These were K and I, First Artillery; A and M, Second Artillery; C and E, Third Artillery; and B Fourth Artillery. Battery G, Fourth Artillery was not mounted until June 1861. These batteries were assigned throughout the Western frontier, at Fort Leavenworth, KS; Fort Duncan, TX; Fort Brown, TX; San Francisco; and Fort Ridgley, MN, when the Civil War began."³

One last significant event for the field artillery that occurred before the Civil War was the selection by the Ordnance Department, in 1857, of the 12-pounder gun-howitzer, developed by Emperor Napoleon III, as the standard gun for the U.S. artillery."³ The best description of this gun was given by Barry.

This gun is made of gun-metal (usually called "bronze"), weighs twelve hundred pounds, mounts upon the field carriage of the twenty-four-pounder howitzer of the former system, is drawn in the field by six horses, and is adapted to the use of solid shot, shell, case-shot, and canister. Of these, assorted in proper proportions, each gun, with its caisson, carries one hundred and twenty-eight rounds. The charge of powder is two pounds, and at five degrees' elevation its greatest effective range is but little short of a mile. At twelve hundred or fifteen hundred yards it is most formidable; and, commencing with case-shot at eight hundred yards and coming to two hundred yards for canister, it is, when properly handled and supported, irresistible."⁴

This gun and the 3-inch ordnance rifle, the Rodman gun, were the predominant guns used by the Union field artillery in the Civil War.

In January 1861, the major advantages in favor of the field artillery were a professional officer corps and a workable field artillery system. The major disadvantages were:

1. There never had been a chief of artillery to speak for the branch.
2. Except for during the Revolutionary War, the War of 1812, and the Mexican War, or when assigned to artillery schools of instruction, the field artillerymen had served mainly as cavalry or infantry since the founding of the Army.
3. Since 1839 no artillery officer had been on the ordnance boards that selected the artillery's equipment.
4. The artillery regimental headquarters had never been used as a tactical headquarters. The highest tactical unit was the battery, and there was no headquarters between battery and regiment.
5. The artillery's organization and tactics were based on experiences in the Mexican War. The largest unit in this war was a division, which was about the size of a Union brigade. The United States did not have an artillery organization for the very large armies of the Civil War. The field artillery was assigned, and subordinate, to infantry regiments and brigades.⁷⁵
6. The impact of the rifled musket on the artillery was not fully understood.⁷⁶

7. The field artillery batteries of the Army were scattered all over the country on frontier duty.

In January 1861 an objective observer would have to conclude, given Barry's limited experiences in a small, frontier army and the less than great condition of the United States field artillery, that the chances of the Union Army fielding a one hundred thousand man army in less than a year with its full compliment of field artillery, properly manned, equipped, and trained, would be very small.

Civil War Years - The Relief of Fort Pickens

In January 1861, Barry was at Fort Leavenworth still serving as the commander of A Battery, Second Artillery. After the secession of South Carolina, all the Union field artillery batteries were called East with Barry's Battery being the first to reach Washington, arriving on 13 January.⁷⁷

On 1 April 1861, Colonel Harvey Brown, Fourth Artillery, received secret orders from General Winfield Scott to proceed to Florida and "re-enforce and hold Fort Pickens, in the harbor of Pensacola." Scott assigned five infantry companies, one company of sappers and miners, and two field artillery batteries, Barry's A, Second Artillery, and Hunt's M, Second Artillery, to Colonel

Brown.⁷⁸

On 4 April, Barry marched his battery from Washington to New York, and two days later he loaded his battery, including the horses, on the steamship Atlantic. They sailed from New York on 7 April and arrived at Fort Pickens on 16 April, coming ashore through the surf onto Santa Rosa Island.⁷⁹

Barry and his battery spent their time at Fort Pickens strengthening the fort's defenses and emplacing heavy batteries that could fire on the Navy Yard at Pensacola, which was in the hands of Confederates commanded by Braxton Bragg. In early April many thought the war would start at Fort Pickens.⁸⁰ But, Colonel Brown made Fort Pickens impregnable, and it was held by the Union for the duration of the war.⁸¹

On 14 May, Barry was promoted to major in the newly formed Fifth Artillery.⁸² Because the threat to Fort Pickens had abated, two weeks later the War Department ordered Barry's and Hunt's Batteries back to Washington to counter the Confederate threat to the Capitol.⁸³ On 27 June, Barry and Hunt loaded their batteries aboard the steamship Illinois.⁸⁴ They arrived in New York on 15 July and took their batteries to Washington on 16 July, five days before the Battle of Bull Run.⁸⁵

Civil War Years - Chief of Artillery
General McDowell's Corps d'Armee

On 19 July, General McDowell, Barry's West Point classmate, made him chief of artillery of the Corps d'Armee.⁸⁶ Hunt had expected the job and was somewhat disappointed, but he understood the strong bond between West Point classmates and highly respected Barry. He did not begrudge Barry his appointment. He did not have to be disappointed long because when Barry was picked to organize the field artillery of the U.S. Army on 22 July, Hunt succeeded him as McDowell's chief of artillery.⁸⁷

The First Battle of Bull Run was a come-as-you-are battle. With only two days from his appointment until the battle, Barry did not have time to reorganize the field artillery, so the batteries fought the battle assigned, and subordinate, to infantry regiments and brigades.⁸⁸ This decentralized organization precluded massing of the artillery at critical points on the battlefield. This was a problem that would not be completely solved until July 1863 in the East and July 1864 in the West.

For this battle McDowell's army, 35,000 ill-trained and unconditioned troops,⁸⁹ had 11 field artillery batteries, nine regular and two militia, consisting of 49 guns of eight different types. The number of guns per battery ranged from two to six. This was an artillery force of 1.4 guns per one thousand soldiers in the field.⁹⁰ The doctrine at this time was that inexperienced troops needed more artillery than experienced ones.

The Army's rule used for assigning guns to units with inexperienced troops was three to four guns per thousand soldiers in the field.⁹¹ Using this rule, McDowell should have had a minimum of 105 guns.

The artillery organization for this first major battle was a good example of the problems that faced the Union army as it transformed from a small frontier army to the mass armies of the Civil War. These problems were mixed calibers in the same battery, batteries subordinate to low-level infantry commanders which precluded massing, no artillery tactical organization above the battery level, and not enough artillery for the experience level of the troops.

Of the 11 batteries available at Bull Run, two were in reserve, two were on the left flank, two were on the right flank, leaving five for deployment with the main body. Barry personally monitored the operations of the batteries of the main body; however, the other six batteries, over half his force, were so removed from his control that he explicitly excluded them from his after action report.⁹² This was a direct result of batteries being subordinate to the infantry brigades.

The field artillery of the main body suffered heavy losses in men, guns, and horses. They had fought bravely, but with little infantry support. The battle ended with a rout of the Union forces with only five of the eleven batteries having been committed to the battle. The artillery was ordered to stay behind by McDowell to cover the retreat, causing the loss of

several more guns.⁹³

McDowell had taken the small, progressive step of appointing a chief of artillery, but he did not make him commander of the field artillery with the army. The batteries were firmly subordinate to regimental and brigade commanders.⁹⁴ Instead of placing Barry in command of the artillery, McDowell used him to convey his orders to the batteries during the battle. McDowell's orders caused two batteries to be placed in exposed positions in front of the Union infantry; they were mauled.⁹⁵ One authority criticizes McDowell for being a senior infantry commander who did not understand how to properly handle field artillery in battle. In fact, McDowell was an artilleryman from the First Artillery who received a brevet to captain for gallantry at Buena Vista during the Mexican War.⁹⁶

Civil War Years - Chief of Artillery Army of the Potomac

The day after the battle, General Scott, now General-in-Chief of the Army, ordered Barry to Washington to organize the artillery of the U.S. Army.⁹⁷ This was another indication of Barry's high reputation throughout the Army as a superb administrator and artilleryman.⁹⁸

On 27 July 1861, General George B. McClellan became the

commander of the Army of the Potomac.⁹⁹ That same day Barry was ordered to the Army of the Potomac as the chief of artillery.¹⁰⁰ In the five days between these two assignments Barry accomplished one very important thing that would have a lasting impact for the duration of the war. He established Camp Barry, an artillery camp of instruction, on Blandenburg Road in Maryland, a few miles east of the Washington. During the entire war, Camp Barry was used to assemble, equip, and train new batteries and to refit battle-damaged batteries. Every battery that joined the Army of the Potomac during the war was trained at this camp.¹⁰¹

McClellan's first job was to discipline and organize the troops in the Washington area. On 2 August 1861, he submitted his estimate to President Abraham Lincoln of the forces he would require to defeat the Confederates in the Eastern theater. He foresaw an army of 250,000 men with 100 field batteries of 600 guns and 15,000 men.¹⁰² When he made his recommendations, the Army of the Potomac had "nine imperfectly-equipped batteries of 30 guns, 650 men, and 400 horses."¹⁰³ It was Barry's job to plan for and organize the field artillery of the army. On 20 August 1861 Barry was promoted to brigadier general of the volunteers.¹⁰⁴

Three days later, Barry submitted his recommendations for the proposed organization of the field artillery for the Army of the Potomac. He told McClellan that he would need "an overwhelming force of field artillery." When Barry made his recommendations, McClellan already had 25 batteries, 13 regular

and 12 volunteer, but Barry told McClellan that the volunteers did not have the knowledge or experience to be effective. His first recommendation was that McClellan request an additional 12 batteries of regular artillery. Since the Confederates did not pose a threat to the United States coast, he proposed that the regular batteries be taken from coast artillery forts and mounted as field artillery. Volunteers would man the coast artillery forts. McClellan got the regular batteries.¹⁰⁵

Next Barry made the following recommendations:

1st. That the proportion of artillery should be in the ratio of at least two and a half pieces to 1,000 men, to be expanded if possible to three pieces to 1,000 men.

2d. That the proportion of rifled guns should be restricted to the system of the U.S. Ordnance Department, and of Parrott and the smooth bore (with the exception of a few howitzers for special service) to be exclusively the 12-pounder gun of the model of 1857, variously called the "gun howitzer," the "light 12-pounder," or the "Napoleon."

3d. That each field battery should, if practicable, be composed of six guns, and none to be less than four guns, and in all cases the guns of each battery should be of uniform caliber.

4th. That the field batteries be assigned to divisions and not to brigades, and in the proportion of four to each division, of which one is to be a battery of regulars, the remainder of volunteers; the captain of the regular battery to be the commander of artillery of the division. In the event of several divisions constituting an army corps, at least one-half of the divisional artillery is to constitute the reserve artillery of the corps.

5th. That the artillery reserve of the whole army should consist of 100 guns [this was one third of the guns with the army], and should comprise, besides a sufficient number of light mounted batteries, all of the guns of position, and until the cavalry was massed all the horse artillery.

6th. That the amount of ammunition to accompany the field batteries is not to be less than 400 rounds per gun.

7th. A siege train of fifty pieces.

8th. That instruction in the theory and practice of gunnery, as well as in the tactics of the arm, is to be given to the officers and non-commissioned officers of the volunteer batteries by the study of suitable textbooks and by actual recitations in each division, under the direction of the regular officer commanding the divisional artillery.

9th. That personal inspections, as frequent as the nature of circumstances would permit, should be made by me, to be assured of the strict observance of the established organization and drill and of the special regulations and orders issued from time to time under the authority of the commanding general, and to note the progressive improvement of the officers and enlisted men of the volunteer batteries, and the actual fitness for field service of the whole, both regular and volunteer.¹⁰⁵

McClellan accepted all recommendations. Except for "trifling modifications," these formed the basis for the field artillery organizations for all the Union armies formed during the war.¹⁰⁷

From Barry's recommendations, it is obvious that he had studied Napoleon's concepts for artillery. Consider the following quotes by Napoleon.

"It is with artillery that war is made."¹⁰⁸

"Great battles are won by artillery."¹⁰⁹

"The artillery must be collected in mass if one wishes to attain decisive results."¹¹⁰

"Experience shows that it is necessary to have four guns to every thousand men."¹¹¹

"The more inferior the quality of a body of troops the more artillery it requires."¹¹²

"In march or in position the greater part of the artillery should be with the infantry and cavalry. The rest should be in reserve."¹³

In addition Napoleon assigned his artillery to divisions and corps to allow massing and standardized the number of calibers of guns.¹⁴

Barry took these lessons from the last successful campaigns involving forces of the size foreseen in the upcoming war. His concepts for an "overwhelming force of artillery," the number of guns required, the division level of organization giving the ability to mass, standardizing the caliber of guns, and an artillery reserve of about one third of the force are all based on Napoleon's art of war. There were no corps in the Army of the Potomac in August 1861; so, Barry organized the artillery at the highest level possible, the division. French, Barry, and Hunt had also used Napoleon's concepts when developing their artillery drill manual, which Barry followed when developing his concepts for determining the "proportion of field artillery to other arms."¹⁵

The result of Barry's plan, with the help of Union industry, was that by March 1862 the field artillery of the army consisted of 94 batteries of 520 guns, 12,500 men, and 11,000 horses. Of this, 52 batteries with 299 guns; 199 with the infantry and cavalry, and 100 with the artillery reserve; were with the Army of the Potomac. The rest were with the Departments of South Carolina, North Carolina, and the Gulf; the command of Major

General Dix; the Mountain Division; McDowell's independent First Corps; Banks's independent Fifth Corps; and the Defenses of Washington.¹¹⁶

This artillery organization was, by far, Barry's greatest contribution to his country during the war. Not only did he field a properly organized "overwhelming artillery force," but he broke the ice in a tradition-bound army making it easier for later organizational changes in the artillery as the war progressed. On 8 October 1861, William Russell, the London Times correspondent to the United States, declared that, "General Barry has done wonders in simplifying the force and reducing the number of calibres [sic], which varied according to the fancy of each state, or men of each officer who raised a battery."¹¹⁷

Barry's final recommendation was to make the chiefs of artillery commanders of the artillery of the army and the divisions. McClellan rejected this and gave the chief of artillery purely administrative duties: he would be responsible for inspecting, supplying, and equipping the artillery, but he could not command it. Nor would McClellan authorize the chiefs of artillery to have staffs.¹¹⁸ The duties and authority of chiefs of artillery would remain unchanged for the entire war. The negative impact of this was best summarized by Henry J. Hunt in a letter to the chief of staff of the Army of the Potomac on 21 February 1864.

After a battle the batteries must be refitted, supplied with ammunition, repairs effected, and placed in condition for service on the march by dawn of the next day. This sometimes involves almost a reorganization.

It cannot be done well without officers [staff]. I call attention specially to the subject in my reports of the battles of Chancellorsville and of Gettysburg. In the first battle, for the artillery of the army (412 guns, 980 artillery carriages, 9,543 men, 8,544 horses, besides their large ammunition trains, and these distributed throughout the army), I had but five field officers, and these, for the want of disposable battery officers, had miserably inefficient staffs. In the Gettysburg campaign, with sixty-seven batteries (372 guns, 320 of which were on the field, with over 8,000 men and 7,000 horses, and the necessary material pertaining to them), I had in the whole army but one general officer (commanding the artillery reserve) and four field officers. Of the seven corps present the artillery of three corps were commanded by captains, and that of one of the corps by a young lieutenant. Both brigades of horse artillery were commanded by captains. These facts need no comment, yet those only who are charged with the management of such a force with so little aid can fully appreciate the evils and difficulties to which they lead.¹¹⁹

It is amazing, given these conditions, that Barry was as successful as he was in organizing, equipping, and training the artillery, and equally amazing that the field artillery was as effective as it was during the war.

Not being the commander of the artillery was not the last of Barry's problems. For an artillery force of 12,500 men, Barry was only authorized four colonels, three lieutenant colonels, and three majors. It would take legislative action to correct these authorizations, but they were not changed during the war.¹²⁰

This caused two problems. Since there was hardly any chance of promotions to field grade rank in the artillery, many promising young officers transferred to the volunteers to get promoted.¹²¹ Moreover, captains who served as division chiefs of artillery were forced to deal directly with division commanders, most of whom were major generals. Even a top infantry commander, Major

General Fitz John Porter, admired the artillerymen and was sympathetic to their plight. He said,

The officers of the artillery have received but little if any reward for their services, and while their companions of the same date were elevated in rank and command they receive not the reward a soldier seeks and they and the army are conscious that they merit, and the fact tends to discourage them. Their duty to the country which educated them and their patriotism alone keeps them in the service so long as they benefit her. Some have been offered promotion in volunteer regiments, but appreciating the value of their services in the artillery and that they could not be spared from an arm which has been among the most prominent in earning victory they have declined the advancement, while others have avoided seeking what they know they could obtain. Such self-sacrifice deserves reward."

While serving as McClellan's chief of artillery, Barry also determined the requirements for fortifications around Washington and planned and conducted the siege operations at Yorktown during the Peninsula Campaign.¹²³ Although important, these accomplishments were minor compared to his reorganization of the United States artillery.

Malvern Hill, one of the most famous artillery engagements of the Civil War, occurred during the Peninsula Campaign while Barry was the chief of artillery of the Army of the Potomac. By 1 July 1862, only one bloody battle of the Seven Days remained, and the Union forces, while being closely pressed by the Confederates, were falling back to Malvern Hill.¹²⁴

This hill is a plateau one and one half miles long by half a mile wide rising 150 feet above the surrounding area. Barry and

Hunt had assembled over 250 guns on Malvern Hill, almost the entire compliment of guns belonging to the Army of the Potomac.¹¹ This was massed artillery!

The Confederates attacked hoping counterbattery fire would silence the Union guns. It was not to be. The Confederate attack was mowed down. When it was over more that 5,000 dead, dying, and wounded rebels were laying at the foot of Malvern Hill.¹²

Confederate General D. H. Hill said, "It wasn't war - it was murder." He also made the statement, "Give me Confederate infantry and Yankee artillery and I'll whip the world," a testament to Barry's success in conceiving, organizing, equipping, and training the Union artillery that fought at Malvern Hill.¹³

During the Battle of Malvern Hill, indirect fire was used in the support of infantry, a unique event for the Civil War. Although there was no evidence to connect Barry directly with this, he was responsible for all the artillery that fought at Malvern Hill.

Naval gunfire from the James River was adjusted onto the enemy by the use of signal flags from a signal station on Malvern Hill to signal officers in the masts of the gunboats. Joseph

¹Fairfax Downey, in his book Cannonade, says that Hunt was McClellan's chief of artillery during the Peninsula Campaign. This is not true. Barry was chief of artillery of the Army of the Potomac and Hunt's superior until 1 September 1862. Hunt was commander of the reserve artillery of the Army of the Potomac. This is not the only instance where Hunt is credited with things Barry did.

Brown, the historian of the Signal Corps during the Civil War, wrote.

Our batteries on the hill came promptly into position and opened in reply, while the great guns of the fleet threw in their shells fairly among the enemy. Almost as soon as the gunboats had left Haxall's station, the signal station on Malvern Hill had come into view to the signal officers stationed on the mast-tops, and the signal messages from the field, -- "Fire one mile to the right," "Good shot," "Fire low and into the woods near the shore," etc., -- were reported to the gunners in a few minutes after their broadsides were opened. The gunboats continued their fire for some time after the land batteries had ceased, and until the enemy's columns, repulsed and scattered, were out of range and hidden from view.¹²⁹

The fire from the gunboats had great effect on the attacking rebels.¹³⁰ Brown further wrote,

The fire of their guns was controlled by the general on the field as readily as was that of his own batteries. The messages to open fire, to cease firing, to fire rapidly, to fire slowly, to fire to the right or left, to alter the elevation of the guns, the ranges, the length of fuses, etc., passed continuously. At one time the order went to fire only single guns, and to wait after each the signal report of the shot.¹³⁰

Most sources contend that the first use of indirect fire in combat was in 1905 in the Russo-Japanese War.¹³¹ Yet, it is clear that indirect fire was used at the Battle of Malvern Hill, and there was at least one other use of indirect fire in the Peninsula Campaign.¹³²

After the Peninsula Campaign, the Army of the Potomac returned to Washington. Supposedly at his own request, Barry was relieved from his position as chief of artillery of the Army of the Potomac on 27 August 1862 to become the Inspector of Artillery of the U.S. Army.¹³³

Civil War Years - Inspector of Artillery
U.S. Army

According to one authority, Brigadier General James Wolfe Ripley, the bureaucratic, hindbound Chief of Ordnance, had urgently requested that Barry be made Inspector of Artillery.¹³⁴ Ripley did ask the War Department for "the assignment of an officer of rank and practical experience of artillery service in the field to the place of inspector of artillery" to standardize the calibers of guns and ammunition.¹³⁵

Barry's qualifications were ideal for the job, but Ripley made his request on 27 August 1862, the same day Barry was relieved from his duties as chief of artillery of the Army of the Potomac. Nor did he specifically ask for Barry. Fifteen days after Barry had reported to Washington, Ripley asked the General-in-Chief to give Barry specific instructions, to be written by Ripley, for his duties.¹³⁶ This indicates that Barry may not have been in agreement with Ripley as to the duties of the Inspector of Artillery. Also, when Barry went West to join Grant's staff in 1864, his replacement was Brigadier General Albion Howe, who was relieved of command of his division after the Battle of Mine Run.¹³⁷ Putting a general that was relieved for cause into a position is an indication of the low status of that position.

It is more likely that Barry was either asked by McClellan

to leave or asked to be relieved because of a disagreement between him and McClellan. Why else would a soldier like Barry, who had spent his entire career with tactical units and was so concerned about his lack of combat service in the Mexican War, ask to be relieved from the most important artillery position of the Civil War?

On 15 September Barry was also appointed the chief of artillery for the defenses of Washington. In this job he was not only responsible for the artillery in position to defend the Capitol, he also became the commander of Camp Barry, the artillery camp of instruction.

As the Inspector of Artillery, he was responsible for standardizing artillery equipment, and by the time of Gettysburg, he had reduced the number of kinds of ammunition in use from 600 to only 140, and had standardized the calibers in the field artillery to Napoleons, Rodmans, and Parrotts.¹³⁸ Barry was in effect serving as the chief of artillery for the U.S. Army, even if he was working for the Chief of Ordnance.

Besides ensuring the standardization of ammunition and calibers, Barry equipped and trained batteries at Camp Barry. From January to December 1863, over 50 batteries passed through the camp.¹³⁹ He also responded to queries and recommendations from the field for improvements to equipment, and proscribed corrections to problems he found in units in the field.¹⁴⁰ In February 1864 he prepared the regulations for the care of field works and the government of their garrisons. He included

procedures that could be used for indirect fire in these regulations."

Besides his duties as Inspector of Artillery and chief of artillery of the defenses of Washington, Barry spent the next 18 months serving on the following boards:

Board of Engineers, Ordnance, and Artillery Officers to rearrange and fix the armament of the permanent fortifications of the whole sea coast of the United States.

Board of Engineer, Ordnance, and Artillery Officers to rearrange and fix the entire armament of the Defenses of Washington.

President of a Board of Ordnance and Artillery Officers to devise a system of wrought iron carriages for field and siege guns.

Board of Engineer and Artillery Officers to consider the practicality of revetting permanent fortifications with iron."

In April 1863, the General-in-Chief sent Barry to Harpers Ferry to make a "thorough inspection of the defenses" and "see that they are put in perfect order with the least practicable delay." Immediately after Barry returned to Washington, Confederate cavalry threatened Pittsburgh and Wheeling. The General-in-Chief again picked Barry for a mission outside of Washington. On 2 May 1863 he made Barry the General-in-Chief of the defenses of Pittsburgh and Wheeling. Barry went to these cities and prepared their defenses using the local militia, but the Confederates never got closer than 35 miles of either city. Barry returned to Washington on 14 May.¹⁴³ These two assignments show again that Barry had the full confidence of the leadership of the Army. On 1 August 1863 Barry was promoted to

lieutenant colonel, Fifth Artillery.¹⁴⁴

On 29 February 1864, Barry received orders making him chief of artillery of the Department of the Mississippi, with headquarters at Nashville, commanded by Major General U. S. Grant.¹⁴⁵ Barry was finally returning to the field.

Civil War Years - Chief of Artillery Department of the Mississippi

The Spring of 1864 marked the turning point of the war. U. S. Grant was now a lieutenant general and the General-in-Chief of the Army with Major General George Meade commanding the Army of the Potomac in the East and Major General William T. Sherman commanding the Department of the Mississippi, an army group consisting of three armies, in the West.¹⁴⁶

General Meade's chief of artillery was Hunt and General Sherman's chief of artillery was Barry.¹⁴⁷ At last, the Union had its two ablest artillerymen serving in the two major theaters of the war.

Grant's strategy was simple. He and Meade, in the East, would put unrelenting pressure on Lee's Army of Northern Virginia. At the same time Sherman would "move against Johnston's army, to break it up, and to go into the interior of the enemy's country as far as he could, inflicting all the damage

he could upon their war resources."¹⁴⁸

Barry departed Washington for Nashville on 11 March 1864.¹⁴⁹ Since the time Barry's orders were issued on 29 February, General Grant had departed Nashville for Washington.¹⁵⁰ The new commanding general of the Department of the Mississippi, William T. Sherman, was commissioned in the artillery when he graduated from West Point.¹⁵¹ Barry immediately launched into organizing the artillery for the army group.

Sherman's army group consisted of three armies with a total of seven corps and four cavalry divisions. When Barry became the chief of artillery, Sherman's artillery consisted of 16,250 men, 530 guns, 4,300 horses, and 987 mules.¹⁵²

In May 1863, Hunt¹⁵³ had reorganized the artillery of the Army of the Potomac, taking the batteries from the divisions and assigning them to the corps as a brigade of artillery. He also reorganized the artillery reserve into four brigades of from four to seven batteries each.¹⁵⁴ This allowed massing of the artillery at the corps level and was the final reorganization of the war. Since Barry was still at Washington as the Inspector of Artillery, he had first-hand knowledge of Hunt's reorganization.

¹Hunt is generally credited with being an organizational genius for developing and implementing the organization of the artillery brigades. But the idea was not his. Colonel Charles S. Wainwright, one of Hunt's chiefs of artillery, recorded in his diary on 25 September 1862, "I told Colonel Hunt that the only way I could see to carry out his ideas would be to unite all the batteries of a corps into a brigade," "He does not approve of that idea" See the attached endnote for other references to Wainwright's ideas.

When Barry got to the Department of the Mississippi, all of the artillery of the three armies was assigned to the divisions, except in Twentieth Corps, which had corps artillery brigades.¹⁵⁵ The reason Twentieth Corps was different was that it had been formed from the Eleventh and Twelfth Corps which came from the Army of the Potomac in the fall of 1863, after Hunt's reorganization of the artillery.¹⁵⁶ By September 1864, Barry had implemented the corps brigade organization in the Department of the Mississippi.¹⁵⁷

Barry organized the artillery to fit the experience of the troops and the nature of the terrain. He recommended to Sherman that the proportion of the artillery to troops be reduced from three guns per 1,000 men to two guns per 1,000 men due the "veteran" condition of Sherman's troops. He also recommended that the number of calibers be reduced from 12 to 4, that an artillery reserve be established for each army, and that the basic load for each gun be 400 rounds.¹⁵⁸

Sherman approved all of Barry's recommendations. Barry applied the same organizational skill he had in 1861 when organizing the artillery of the Army of the Potomac. By the time the army group took the field in May 1864, the artillery consisted of 74 batteries consisting of 6,292 men, 254 guns, and 4,668 horses. They were all trained, equipped, and ready.¹⁵⁹

Because of the nature of the terrain between Nashville and Atlanta, Sherman directed that the armies' artillery reserves be left behind at Nashville and Chattanooga. The reserve artillery

parks became camps of instruction just like Camp Barry was in the East. These camps were also used to refit battle-damaged batteries.¹⁶⁰

The terrain between Nashville and Atlanta is rugged and cross compartmented. The large tracts of uncleared land, dense forest, and rough terrain sometimes affected the artillery's usefulness, and often forced batteries into hazardous positions. This resulted in three division chiefs of artillery being killed, and the serious wounding of the chief of artillery of the Army of the Tennessee by rebel sharpshooters while the chiefs were selecting positions for their batteries.¹⁶¹

On 2 September, Sherman captured Atlanta. The artillery had performed admirably, especially at Rocky Face Ridge, Resaca, Kenesaw, and Atlanta, many times serving on the skirmish line.¹⁶² Barry had again organized and fielded a large, effective artillery force.

Perhaps it was merely coincidental, but during the Battle of Atlanta, another use of indirect fire occurred with Barry on the field of battle. This one was much more refined than the ones during the Peninsula Campaign. Captain Lyman Bridges, commander of the Artillery Brigade of the Fourth Army Corps, made the following statements in his official report of 9 September 1864.

July 28 and 29, the range and distance having been given each battery from actual survey, in accordance with orders received from Major-General Stanley, commanding Fourth Army Corps, the rifled batteries opened fire upon Atlanta. Signal stations having been established in front of each division the effect of the firing was seen, as nearly every shot was fired.¹⁶³

Using survey data for artillery fire was a major leap in the development of indirect fire procedures.

On 1 September 1864 Barry was promoted to Brevet Colonel, U.S. Army, and Brevet Major General, U.S. Volunteers.¹⁶⁴ The next month, before Sherman started his march to Savannah, Barry became sick with erysipelas, an acute infection of the skin and mucous membranes that is caused by a streptococcus. It was so severe that he reluctantly had to take sick leave. He did not rejoin Sherman until the army reached Savannah.¹⁶⁵

From February to March 1865, Sherman marched through the Carolinas and took General Joseph Johnston's surrender on 26 April at Raleigh, NC.¹⁶⁶ On 13 March 1865 Barry was promoted to Brevet Brigadier General and Brevet Major General, U.S. Army.¹⁶⁷

Because the Carolina Campaign would involve long and rapid marches over bad roads, Barry reduced the number of guns to one per 1,000 soldiers and had eight horses pull each artillery piece and caisson instead of six. He obtained the extra horses by reducing the number of guns in most batteries from six to four.¹⁶⁸ The field artillery consisted of 16 batteries, totalling 68 guns. The basic load for each gun was 350 rounds. The artillery served with distinction in this last campaign of the Civil War.¹⁶⁹

General Barry finished the war as he had begun it, in the field with artillery soldiers engaged in combat. He had been instrumental in organizing, equipping, and training the artillery of the entire U. S. Army. He had contributed more than anyone

else in making the Union field artillery a formidable force on the battlefield.

In July 1865, Barry moved with Sherman's headquarters to St. Louis. On 11 December 1865 Barry was promoted to colonel, Second Artillery, and the next month he was mustered out of the Volunteer Service.¹⁷⁰

The End of Forty-One Years in the Army

In 1866, the American members of the Fenians, predecessors of the Irish Republican Army, attacked British interests in Canada. On 15 June, General Grant personally selected Barry to be the military commander of the Northern frontier of the United States during these disturbances. The British and the Canadians formally recognized Barry for his outstanding performance in this critical position.¹⁷¹

In November 1867 another event occurred that again showed Barry's high standing in the Army as an artilleryman. He was appointed to establish and organize the school of instruction for artillery lieutenants at Fort Monroe, VA. He was Commandant for ten years, and when he left to serve again with the Second Artillery, the school was firmly established and providing a valuable service to the nation.¹⁷²

After all the years of struggle to improve the field

artillery, experiencing frustrations many times when serving in light artillery with no horses, in malaria and yellow fever infested swamps as infantry, of not having a chief of artillery to support and champion the artillery service, seeing several attempts at a field artillery school fail, and being responsible for the Union field artillery during the Civil War without proper staffs and field grade officer authorizations, Barry wrote General John C. Tidball¹⁷³ on 25 March 1868, saying,

If the Artillery itself will now only lay aside its "envy, malice, and all uncharitableness," its dislikes on mere personal grounds, and some of those other emotions you are as well aware as I have so often militated against our progress, we may, I think, hope for something [the Artillery School at Fort Monroe] substantial and permanent.¹⁷⁴

This great man was willing to forget all these personal frustrations to ensure that the Artillery School had a chance to become a permanent institution.

After ten years Barry moved from Fort Monroe to Fort McHenry, MD, the home of the Second Artillery. His health has always been poor, as evidenced by his long sick leaves during both the Mexican and Civil Wars, and after serving two years at Fort McHenry he died on 18 July 1879, one month short of his sixty-first birthday, from the complications of malaria. For a

¹⁷³Tidball was in A, Second Artillery when Barry was the battery commander. He commanded horse artillery units throughout the war and rose to the rank of colonel during the war. Of all those that served in the artillery in the Civil War, he is the most prolific writer about the artillery. During the Peninsula Campaign during which he commanded A Battery, Second Artillery, Tidball began the custom of playing "Taps" at the burial of a soldier. He died in 1906.

man who had served 41 years in the Army¹⁸ and had instituted sweeping changes in the United States artillery, William Ferquhar Barry deserves his place in history.

APPENDIX

Barry, William F. (Bill)

Brevet Major General U.S. Volunteers

DOR: 1 September 1864 (1833 Yr Gp)

BORN: 18 August 1818, New York, NY

DIED: 18 July 1879, Fort McHenry, MD

WIFE'S NAME: Katherine McKnight (Kate)



EDUCATION:

Dates

1834-1838

Names, Place

USMA, West Point, NY

CAREER HIGHLIGHTS:

Dates

1838

1839-1846

1846

1846-1848

1848-1852

1852-1853

1853-1857

1857-1858

1858-1860

1858-1859

JAN-APR 61

APR-JUN 61

JUL 1861

JUL 61-SEP 62

SEP 62-MAR 64

MAR 64-JAN 66

JAN 66-JUN 66

JUN 66-SEP 67

OCT 67-MAR 77

MAR 77-JUL 79

Position, Organization, Location

C BTRY, 3D ARTY, CARLISLE BARRACKS

A BTRY, 2D ARTY, BUFFALO, NY; TRENTON, NJ; FT
HAMILTON, NY; FT LAFAYETTE, NY; FT ADAMS,
RI; FT TRUMBULL, CT

RECRUITING DUTY, PITTSBURGH, PA

A BTRY, 2D ARTY; ASST AG, MG PATTERSON'S
DIV; ASST AG, 1ST BDE, MG WORTH'S

DIV; AIDE-DE-CAMP, MG WORTH, MEXICAN WAR

A BTRY, 2D ARTY, FT MONROE; FT MCHENRY, MD

A BTRY, 2D ARTY, SEMINOLE WARS, FLORIDA

A BTRY, 2D ARTY, BATON ROUGE, LA; FT WASHITA,
INDIAN TERRITORY; FT HAMILTON, NY

ON FRONTIER DUTY WITH A BTRY, 2D ARTY, FT
SNELLING, MN; FT LEAVENWORTH; FT KEARNY, NE

COMMANDER, A BTRY, 2D ARTY, FT LEAVENWORTH

MEMBER OF LIGHT ARTILLERY BOARD TO REVISE
LIGHT ARTILLERY MANUAL

COMMANDER, A BTRY, 2D ARTY, DEFENSES OF
WASHINGTON, DC

COMMANDER, A BTRY, 2D ARTY, RELIEF OF FORT
PICKENS, FL

CHIEF OF ARTILLERY, BG MCDOWELL'S CORPS DE
ARMEE

CHIEF OF ARTILLERY, ARMY OF THE POTOMAC

INSPECTOR OF ARTILLERY, U.S. ARMY; CHIEF OF
ARTILLERY, DEFENSES OF WASHINGTON

CHIEF OF ARTILLERY, DEPARTMENT OF THE
MISSISSIPPI

AWAITING ORDERS

COMMANDER, NORTHERN FRONTIER OF THE U.S.

COMMANDER, ARTILLERY SCHOOL OF INSTRUCTION,
FT MONROE, VA

COMMANDER, SECOND ARTILLERY, FT MCHENRY, MD

BATTLE CAMPAIGNS: MEXICAN WAR, SEMINOLE WAR, RELIEF OF FT PICKENS. FIRST MANASSAS CAMPAIGN (Battle of Bull Run). PENINSULA CAMPAIGN (Siege of Yorktown, Battle of Gaines' Mill, Skirmish of Mechanicsville, Battle of Charles City Cross Roads, Battle of Malvern Hill, Battle of Harrison's Landing), DEFENSE OF PITTSBURGH, PA. AND WHEELING, VA, ATLANTA CAMPAIGN (Battle of Tunnel Hill, Battle of Rocky-Faced Ridge, Battle of Resaca, Battle of Adairsville and Cassville, Battle of New Hope Church, Battle of Kenesaw Mountain, Battle of Peach Tree Creek, Battle of Atlanta, Siege of Atlanta, Battle of Jonesborough, Battle of Lovejoy's Station), NORTH GEORGIA AND ALABAMA CAMPAIGN (Battle of Snake Creek Gap, Battle of Ship's Gap, Battle of Rome), CAROLINA CAMPAIGN (Battle of Duck Creek, Battle of Salkehatchie, Battle of Edisto, Battle of Congaree Creek, Battle of Chesterfield Court House, Battle of Averysborough, Battle of Bentonville)

AWARDS: BREVET MAJOR GENERAL, U.S. Volunteers, for Gallant and Meritorious Conduct in the Campaign of Atlanta, BREVET COLONEL, U.S. Army, for Gallant and Meritorious Service in the Capture of Atlanta, BREVET BRIGADIER GENERAL, U.S. Army, for Gallant and Meritorious Services in the Campaign Terminating with the Surrender of the Insurgent Army under General J. E. Johnston, BREVET MAJOR GENERAL, U.S. Army, for Gallant and Meritorious Services in the Field during the Rebellion.

PUBLICATIONS: "A Few Facts About Artillery." The United States Service Magazine I (January 1864): 12-20; Report of the Engineer and Artillery Operations of the Army of the Potomac, From Its Organization to the Close of the Peninsula Campaign. (Co-Author) New York: D. Van Nostrand, 1863; Instruction for Field Artillery. (Co-Author) Philadelphia: J. B. Lippincott and Company, 1860.

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